

PPSC Competitive Exam for the Post of Programmer

Question Paper Along with Answer Key

Date: 21st June, 2014

Time: 12: 00 PM to 02:00 PM

Total Number of Questions: 100

Q 1.

A recursive relationship is a relationship between an entity and _____

Options:

- A) a subtype entity
- B) an instance entity
- C) itself
- D) an archetype entity

Correct Option: Option "C"

Q 2.

Multivalued attributes are shown by _____.

Options:

- A) { }
- B) ()
- C) >
- D) <>

Correct Option: Option "A"

Q 3.

_____ specifies the maximum number of relationship instances that an entity can participate.

Options:

- A) domain
- B) cardinality
- C) range
- D) ceiling

Correct Option: Option "B"

Q 4.

Which type of entity has its relationship to another entity determined by an attribute in that other entity called a discriminator?

Options:

- A) Archetype entity
- B) Subtype entity
- C) Instance entity
- D) Supertype entity

Correct Option: Option "B"

Q 5.

Which of these is not an unary operation?

Options:

- A) Select
- B) Project
- C) Union
- D) Rename

Correct Option: Option "C"

Q 6.

Who proposed the relational model?

Options:

- A) Bill Gates
- B) Charles Babbage
- C) Herman Hollerith
- D) E.F. Codd

Correct Option: Option "D"

Q 7.

Set of permitted values of each attribute is called _____.

Options:

- A) Tuple
- B) Domain
- C) Relation
- D) Schema

Correct Option: Option "B"

Q 8.

What is the name of the operator in a relation that yields values from all rows in a table?

Options:

- A) Difference
- B) Join
- C) Project
- D) Select

Correct Option: Option "D"

Q 9.

What is a predicate expressing a condition that always must be satisfied?

Options:

- A) Assertion
- B) Trigger
- C) Procedure
- D) Generalization

Correct Option: Option "A"

Q 10.

What SQL is a set of statements that allows SQL to be used with traditional programming languages

Options:

- A) Embedded
- B) QBE
- C) QUEL
- D) Common SQL

Correct Option: Option "A"

Q 11.

What constraints maintain uniqueness in a record?

Options:

- A) Entity integrity
- B) Domain Integrity
- C) Check Integrity
- D) Referential Integrity

Correct Option: Option "A"

Q 12.

What is the result of the following query? SELECT FLOOR(3.6) FROM DUAL?

Options:

- A) 3.5
- B) 3
- C) 4
- D) 3.7

Correct Option: Option "D"

Q 13.

If an entity appears in N relationships then it is

Options:

- A) a 1:1 relationship
- B) a 1:N relationship
- C) a N:1 relationship
- D) a N:M relationship

Correct Option: Option "B"

Q 14.

A DBMS has the following components

- (i) a data definition language;**
- (ii) a query language;**
- (iii) a security system;**
- (iv) audit trail**

Options:

- A) i, ii
- B) i, ii, iii
- C) i, ii, iii, iv
- D) i, ii, iv

Correct Option: Option "C"

Q 15.

The sequence followed in designing a DBMS are

Options:

- A) physical model - conceptual model - logical model
- B) logical model - physical model - conceptual model
- C) conceptual model - logical model - physical model
- D) conceptual model - physical model - logical model

Correct Option: Option "C"

Q 16.

Which-one of the following statements about normal forms is FALSE?

Options:

- A) Loss less, dependency – preserving decomposition into BCNF is always possible
- B) BCNF is stricter than 3 NF
- C) Any relation with two attributes is BCNF
- D) Lossless, dependency -preserving decomposition into 3 NF is always possible

Correct Option: Option “A”

Q 17.

Any relation with two attributes is BCNF

Options:

- A) 2NF
- B) 3NF
- C) 4NF
- D) 5NF

Correct Option: Option “C”

Q 18.

Tables in second normal form (2NF):

Options:

- A) Eliminate all hidden dependencies
- B) Have all non key fields depend on the whole primary key
- C) Eliminate the possibility of a insertion anomalies
- D) Have a composite key

Correct Option: Option “A”

Q 19.

Dates must be specified in the format

Options:

- A) mm/dd/yy
- B) yyyy/mm/dd
- C) dd/mm/yy
- D) yy/dd/mm

Correct Option: Option “B”

Q 20.

Which of the following is used to store movie and image files ?

Options:

- A) Clob
- B) Binary
- C) Image
- D) Blob

Correct Option: Option “D”

Q 21.

Values of one type can be converted to another domain using which of the following?

Options:

- A) Cast
- B) Drop type
- C) Alter type
- D) Convert

Correct Option: Option "A"

Q 22.

What is a DATABLOCK

Options:

- A) Set of Extents
- B) Set of Segments
- C) Smallest Database storage unit
- D) None of the options

Correct Option: Option "C"

Q 23.

A set of dictionary tables are created

Options:

- A) Once for the entire database
- B) Every time a user is created
- C) Every time a tables space is created
- D) None of the options

Correct Option: Option "A"

Q 24.

What does DLL stands for

Options:

- A) Dynamic Language Library
- B) Dynamic Link Library
- C) Dynamic Load Library
- D) None of the options

Correct Option: Option "B"

Q 25.

The SQL WHERE clause

Options:

- A) Limits the column data that are returned.
- B) Limits the row data that are returned.
- C) Limits both the column data and row data that are returned.
- D) Neither Limits the column data NOR the row data that are returned

Correct Option: Option "B"

Q 26.

A sub query in an SQL SELECT statement is enclosed in

Options:

- A) braces -- {...}.
- B) CAPITAL LETTERS
- C) parenthesis -- (...) .
- D) brackets -- [...].

Correct Option: Option "C"

Q 27.

Which of the following is used as the embedded SQL in COBOL?

Options:

- A) EXEC SQL ;
- B) EXEC SQL END-EXEC
- C) EXEC SQL
- D) EXEC SQL END EXEC;

Correct Option: Option "B"

Q 28.

_____ Clause specifies the groups into which output rows are to be placed and, if aggregate functions are included in the SELECT clause.

Options:

- A) ORDER BY
- B) GROUP
- C) GROUP BY
- D) GROUP IN

Correct Option: Option "C"

Q 29.

The SELECT statement, that retrieves all the columns from empinfo table name starting with d to p is _____

Options:

- A) SELECT ALL FROM empinfo WHERE ename like '[d-p]%' ;
- B) SELECT * FROM empinfo WHERE ename is '[d-p]%' ;
- C) SELECT * FROM empinfo WHERE ename like '[p-d]%' ;
- D) SELECT * FROM empinfo WHERE ename like '[d-p]%' ;

Correct Option: Option "D"

Q 30.

The result of a SQL SELECT statement is a(n) _____.

Options:

- A) report
- B) form
- C) File
- D) Table

Correct Option: Option "D"

Q 31.

To remove duplicate rows from the results of an SQL SELECT statement, the _____ qualifier specified must be included.

Options:

- A) ONLY
- B) UNIQUE
- C) DISTINCT
- D) SINGLE

Correct Option: Option "C"

Q 32.

The default parameter type in stored procedures is

Options:

- A) IN
- B) OUT
- C) INOUT
- D) There is no default type

Correct Option: Option "A"

Q 33.

To delete a database _____ command is used

Options:

- A) delete database database_name
- B) Delete database_name
- C) drop database database_name
- D) drop database_name

Correct Option: Option "C"

Q 34.

Some of the utilities of DBMS are _____

- i) Loading;
- ii) Backup;
- iii) File organization;
- iv) Process Organization

Options:

- A) i, ii, and iv only
- B) i, ii and iii only
- C) ii, iii and iv only
- D) All i, ii, iii, and iv

Correct Option: Option "B"

Q 35.

_____ allows individual row operation to be performed on a given result set.

Options:

- A) Procedure
- B) Trigger
- C) Curser
- D) View

Correct Option: Option "C"

Q 36.

Which feature converts row data to column for better analytical view?

Options:

- A) Views
- B) Join
- C) Pivot
- D) Trigger

Correct Option: Option "C"

Q 37.

Capabilities of RAISERROR

Options:

- A) It can be logged in the error log
- B) It can print a message to the application
- C) It can assign an error number, state and severity
- D) All of the options

Correct Option: Option "D"

Q 38.

Problems occurs if we don't implement proper locking strategy

Options:

- A) Dirty reads
- B) Phantom reads
- C) Lost updates
- D) Unrepeatable reads

Correct Option: Option "D"

Q 39.

You have a column that will only contain values from 0 to 256. What is the most economical data type to use for the column?

Options:

- A) TINYINT
- B) SMALLINT
- C) INT
- D) DECIMAL(1)

Correct Option: Option "B"

Q 40.

Which of the given is not an integrity constraint?

Options:

- A) Not null
- B) Positive
- C) Unique
- D) Check 'predicate'

Correct Option: Option "B"

Q 41.

Domain constraints, functional dependency and referential integrity are special forms of _____.

Options:

- A) Assertion
- B) Foreign key
- C) Referential constraint
- D) Primary key

Correct Option: Option "A"

Q 42.

When there is more than one key in a relation, then each such key is called _____.

Options:

- A) Primary
- B) Foreign
- C) Candidate
- D) Multiple

Correct Option: Option "C"

Q 43.

Which of the following is not a property of transactions?

Options:

- A) Atomicity
- B) Isolation
- C) Durability
- D) Concurrency

Correct Option: Option "D"

Q 44.

In an E-R diagram double lines indicate

Options:

- A) Total participation.
- B) Multiple participation.
- C) Cardinality N.
- D) None of the options

Correct Option: Option "A"

Q 45.

The metadata is created by the

Options:

- A) DML compiler
- B) DML pre-processor
- C) DDL interpreter
- D) Query interpreter

Correct Option: Option "C"

Q 46.

The cost of reading and writing temporary files while evaluating a query can be reduced by

Options:

- A) building indices
- B) pipelining
- C) join ordering
- D) none of the options

Correct Option: Option "B"

Q 47.

In b-tree the number of keys in each node is ____ than the number of its children

Options:

- A) one less
- B) one more
- C) Same
- D) Half

Correct Option: Option "A"

Q 48.

SMP stands for

Options:

- A) System multi-processing
- B) Server multi-processing
- C) Symmetric multi-processing
- D) Securing multi-processing

Correct Option: Option "C"

Q 49.

Optimization basically related to the Rewrite module is termed as _____

Options:

- A) Semantic query optimization
- B) Global query optimization
- C) Both Semantic query optimization & Global query optimization
- D) None of the options

Correct Option: Option "A"

Q 50.

In query processor which ordering is related to hash joins by SQL server 7.0

Options:

- A) Interesting ordering
- B) Index intersection
- C) Index joins
- D) Parallel queries

Correct Option: Option "A"

Q 51.

How many types of indexes are there in sql server?

Options:

- A) 1
- B) 2
- C) 3
- D) 4

Correct Option: Option "B"

Q 52.

In _____ index instead of storing all the columns for a record together, each column is stored separately with all other rows in an index.

Options:

- A) Clustered
- B) Column store
- C) Non clustered
- D) Row store

Correct Option: Option "B"

Q 53.

A locked file can be?

Options:

- A) Accessed by only one user
- B) Modified by users with the correct password
- C) Is use to hide sensitive information
- D) Both Modified by users with the correct password & Is use to hide sensitive information

Correct Option: Option "A"

Q 54.

Periodically adding, changing and deleting file records is called file _____

Options:

- A) Updating
- B) Upgrading
- C) Restricting
- D) Renewing

Correct Option: Option "A"

Q 55.

Which of the following is a stored procedure that Oracle automatically fires under appropriate conditions?

Options:

- A) Constraint
- B) Trigger
- C) Curser
- D) Recursive function

Correct Option: Option "B"

Q 56.

Which of the following are the indices based on the uniform distribution of values across a range of buckets?

Options:

- A) Hash indices
- B) Primary indices
- C) Sparse indices.
- D) Ordered indices

Correct Option: Option "A"

Q 57.

A b-tree of order m has maximum ____ children

Options:

- A) M
- B) M+1
- C) m-1
- D) m/2

Correct Option: Option "A"

Q 58.

A clustering index is defined on the fields which are of type

Options:

- A) Non-key and ordering
- B) Non-key and non-ordering
- C) Key and ordering
- D) Key and non-ordering

Correct Option: Option "A"

Q 59.

A primary key should be defined as

Options:

- A) NULL
- B) NOT NULL
- C) Both NULL and NOT NULL
- D) Neither NULL nor NOT NULL

Correct Option: Option "B"

Q 60.

Student and courses enrolled, is an example of

Options:

- A) One-to-one relationship
- B) One-to-many relationship
- C) many-to-one relationship
- D) many-to-many relationship

Correct Option: Option "A"

Q 61.

Manager's salary details are hidden from the employee. This is_____

Options:

- A) Conceptual level data hiding
- B) Physical level data hiding
- C) External level data hiding
- D) None of the options

Correct Option: Option "A"

Q 62.

Assume transaction A holds a shared lock R. If transaction B also requests for a shared lock on R_____

Options:

- A) It will result in a deadlock situation
- B) It will immediately be granted
- C) It will immediately be rejected
- D) It will be granted as soon as it is released by A

Correct Option: Option "D"

Q 63.

The concept of locking can be used to solve the problem of_____

Options:

- A) Lost update
- B) Uncommitted dependency
- C) Inconsistent data
- D) All of the options

Correct Option: Option "D"

Q 64.

The entity-relationship model comes under_____

Options:

- A) Object based logical modal
- B) Relational model
- C) Physical data model
- D) None of the options

Correct Option: Option "B"

Q 65.

If every non-key attribute is functionally dependent on the primary key, then the relation will be in_____

Options:

- A) First normal form
- B) Second normal form
- C) Third normal form
- D) Fourth normal form

Correct Option: Option "B"

Q 66.

Which of the following is record based logical model?

Options:

- A) Object oriented model
- B) E-R model
- C) Network model
- D) None of the options

Correct Option: Option "C"

Q 67.

A data dictionary contains _____

Options:

- A) The data type of all fields in all files
- B) The name of all fields in all files
- C) The width of all fields in all files
- D) All of the options

Correct Option: Option "D"

Q 68.

E-R modeling technique is a _____

Options:

- A) Top-down approach
- B) Bottom-up approach
- C) Left-right approach
- D) None of the options

Correct Option: Option "A"

Q 69.

A data dictionary doesn't provide information about _____

Options:

- A) Where data is located
- B) The size of the disk storage device
- C) Who owns or is responsible for the data
- D) How the data is used

Correct Option: Option "B"

Q 70.

Architecture of the database can be viewed as _____ level/levels.

Options:

- A) 1
- B) 2
- C) 3
- D) 4

Correct Option: Option "C"

Q 71.

_____ is a class whose instances themselves are classes.

Options:

- A) subclass
- B) abstract class
- C) metaclass
- D) object class

Correct Option: Option "C"

Q 72.

_____ enables you to hide, inside the object, both the data fields and the methods that act on that data.

Options:

- A) Encapsulation
- B) Polymorphism
- C) Inheritance
- D) Overloading

Correct Option: Option "A"

Q 73.

To be called object-oriented, a programming language must allow _____

Options:

- A) functions that return values
- B) Library of predefined functions
- C) Inheritance
- D) All of the options

Correct Option: Option "C"

Q 74.

Which statement is true regarding an object?

Options:

- A) An object is what classes instantiated are from
- B) An object is an instance of a class
- C) An object is a variable
- D) An object is not an instance of a class.

Correct Option: Option "B"

Q 75.

A process that involves recognizing and focusing on the important characteristics of a situation or object is known as _____

Options:

- A) Encapsulation
- B) Polymorphism
- C) Abstraction
- D) Inheritance

Correct Option: Option "C"

Q 76.

In object oriented programming, composition relates to

Options:

- A) The use of consistent coding conventions
- B) The organization of components interacting to achieve a coherent, common behavior
- C) The use of inheritance to achieve polymorphic behavior
- D) The use of data hiding to achieve polymorphic behavior.

Correct Option: Option "B"

Q 77.

For a 16 bit word length Integer data type values lie between _____

Options:

- A) -32768 to 32767
- B) 0 to 32767
- C) -128 to 128
- D) 0 to 128

Correct Option: Option "A"

Q 78.

Which of the following is NOT a Relational Operator

Options:

- A) ==
- B) >
- C) %
- D) !=

Correct Option: Option "C"

Q 79.

Which of the following does not belong: If a class inherits from some other class, it should

Options:

- A) Make use of the parent class's capabilities
- B) Over-ride or add the minimum to accomplish the derived class' purpose
- C) Over-ride all the methods of its parent class
- D) Make sure the result "contains" its base class.

Correct Option: Option "C"

Q 80.

Object oriented inheritance models the _____

Options:

- A) "is a kind of" relationship
- B) "has a" relationship
- C) "want to be" relationship
- D) "contains" of relationship.

Correct Option: Option "A"

Q 81.

Given a class named student, which of the following is a valid constructor declaration for the class?

Options:

- A) Student (student s) { }
- B) Student student () { }
- C) Private final student () { }
- D) Void student () { }

Correct Option: Option "A"

Q 82.

_____ is an abstract idea that can be represented with data structures and functions.

Options:

- A) Class
- B) object
- C) loop
- D) data type

Correct Option: Option "A"

Q 83.

_____ class can share selected properties of its base classes

Options:

- A) abstract
- B) derived
- C) subclass
- D) both derived & subclass

Correct Option: Option "D"

Q 84.

this pointer

Options:

- A) Implicitly points to an object.
- B) Can be explicitly used in a class.
- C) Can be used to return an object.
- D) All of the options

Correct Option: Option "D"

Q 85.

Data members which are static

Options:

- A) cannot be assigned a value
- B) can only be used in static functions
- C) cannot be defined in a Union
- D) can be accessed outside the class

Correct Option: Option "B"

Q 86.

What is printed by the following statement? `System.out.print("Hello,\nworld!");`

Options:

- A) Hello, \nworld!
- B) Hello,
World!
- C) "Hello, \nworld!"
- D) None of the options

Correct Option: Option "B"

Q 87.

_____ tool helps us to find errors in our programs.

Options:

- A) Jhelp
- B) javah
- C) javap
- D) jdb

Correct Option: Option "D"

Q 88.

_____ is reserved keyword in java

Options:

- A) Abstract
- B) Extends
- C) Package
- D) All of the options

Correct Option: Option "D"

Q 89.

Which of the following is the correct declaration statement in java program?

Options:

- A) `int num=new int[5]`
- B) `int num=new num[5]`
- C) `int[] num=new int[5]`
- D) None of the options

Correct Option: Option "C"

Q 90.

_____ is default access specifier in JAVA.

Options:

- A) friendly
- B) private
- C) protected
- D) public

Correct Option: Option "A"

Q 91.

We cannot create a subclass of _____ class

Options:

- A) Abstract
- B) public
- C) static
- D) final

Correct Option: Option "D"

Q 92.

Which of the following statement is true?

Options:

- A) A subclass is a sub set of a superclass.
- B) Class ClassTwo extends ClassOne means ClassOne is subclass.
- C) Class ClassTwo extends ClassOne means ClassTwo is super class.
- D) The class Class is the super class of all other classes in Java.

Correct Option: Option "A"

Q 93.

```
1. public class Person {  
2. private String name;  
3. public Person(String name) { this.name = name; }  
4. public boolean equals(Person p) {  
5. return p.name.equals(this.name);  
6. }  
7. }
```

Which statement is true?

Options:

- A) The equals method does NOT properly override the Object.equals method
- B) Compilation fails because the private attribute p.name cannot be accessed in line 5
- C) To work correctly with hash-based data structures, this class must also implement the hashCode method
- D) When adding Person objects to a java.util.Set collection, the equals method in line 4 will prevent duplicates

Correct Option: Option "A"

Q 94.

Which of the following assignments is illegal in Java?

Options:

- A) subclass_reference = subclass_object
- B) subclass_reference = superclass_object
- C) superclass_reference = subclass_object
- D) superclass_reference = superclass_object

Correct Option: Option "B"

Q 95.

“Converting invalid string to a number” is the _____ type of error.

Options:

- A) Run-time
- B) Exception
- C) Logical
- D) Compile-time

Correct Option: Option “A”

Q 96.

Which of these method of Object class can clone an object?

```
class access{
    public int x;
    private int y;
    void cal(int a, int b){
        x = a + 1;
        y = b;
    }
}
class access_specifier {
    pu
```

Options:

- A) Objectcopy()
- B) copy()
- C) Object clone()
- D) clone()

Correct Option: Option “C”

Q 97.

What is the output of this program?

```
class access{
    public int x;
    private int y;
    void cal(int a, int b){
        x = a + 1;
        y = b;
    }
}
class access_specifier {
    public static void
```

Options:

- A) 3 3
- B) 2 3
- C) Runtime Error
- D) Compilation Error

Correct Option: Option “C”

Q 98.

What is the output of this program?

```
class access{
    public int x;
    private int y;
    void cal(int a, int b){
        x = a + 1;
        y = b;
    }
    void print() {
        system.out.println(" " + y);
    }
}
```

Options:

- A) 2 3
- B) 3 3
- C) Runtime Error
- D) Compilation Error

Correct Option: Option "B"

Q 99.

Which statement(s) are true?

Options:

- A) Cohesion is the OO principle most closely associated with hiding implementation details
- B) Cohesion is the OO principle most closely associated with making sure that classes know about other classes only through their APIs
- C) Cohesion is the OO principle most closely associated with making sure that a class is designed with a single, well-focused purpose
- D) Cohesion is the OO principle most closely associated with allowing a single object to be seen as having many types

Correct Option: Option "C"

Q 100.

What is the output of this program?

```
class evaluate {
    public static void main(String args[])
    {
        int a[] = {1,2,3,4,5};
        int d[] = a;
        int sum = 0;
        for (int j = 0; j < 3; ++j)
            sum +=
```

Options:

- A) 38
- B) 39
- C) 40
- D) 41

Correct Option: Option "C"